AMENDMENT UNDER 37 C.F.R. § 1.111

Appln. No.: 09/767,850

AMENDMENTS TO THE SPECIFICATION

Please delete the first three full paragraph of the specification, beginning on page 2, line 8 and ending on page 3, line 2, and replace them with the following new paragraphs:

Attorney Docket No.: Q62670

Brief Description of the Drawings

According to the invention, this object is achieved by the constellation information transmitting arrangement defined by claim 1, and the constellation information receiving arrangement defined by claim 7.

Indeed, by grouping the carriers in subsets and by transmitting for each subset only a limited set of parameter values as constellation information from which the constellation of each carrier in the subset can be derived through interpolation, the size of the constellation information message to be transferred is reduced significantly. Consider for instance a multi-carrier system with N carriers, with e.g. N=4096. The carriers are indexed from 0 to N-1.

Detailed Description of the Invention

The set of carriers is split into M subsets of carriers, Sn, with e.g. M=8. To each subset is associated a set of L parameters Pn, with e.g. L=2. Two interpolation functions B and G are defined so that the number of bits and the gain for the carrier with index k belonging to subset Sn respectively equals Bk=B(k,Pn) and Gk=G(k,Pn). Instead of N times the bits and gains information for a carrier, only M times L parameter values have to be encapsulated in the constellation information message. According to the present invention, this message also may contain the description of the carrier subsets, the parameters, and the interpolation functions. It is however more preferably to describe the subsets, parameters and functions a priori, for example

AMENDMENT UNDER 37 C.F.R. § 1.111

Appln. No.: 09/767,850

Attorney Docket No.: Q62670

and who

in a standard specification such as VDSL (Very High Speed Digital Subscriber Line) standard specification, currently under development.

Please insert the following headings and paragraph after the paragraph that ends on line 21 of page 4:

Brief Description of the Drawings

The drawing Fig. is a functional block scheme of a multi-carrier receiver RX comprising an embodiment of the constellation information receiving arrangement BiGi_RA according to the present invention.

Detailed Description of the Preferred Embodiment